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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/029,150 | 12/31/2001 | Young Jun Jung | K-0383 | 5205 |

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EXAMINER

CHEA, PHILIP J

ART UNIT PAPER NUMBER

2153

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|-----------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/029,150 | JUNG, YOUNG JUN | |
| | Examiner | Art Unit | |
| | Philip J. Chea | 2153 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

PS

DETAILED ACTION

This Office Action is in response to an Amendment filed June 10, 2005. Claims 1-4,6-13,15-18 are currently pending, of which claims 15-18 are new. Any rejection not set forth below has been overcome by the current Amendment.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,2,7,8 rejected under 35 U.S.C. 102(e) as being anticipated by Sridhar et al. (US 6,266,701), herein referred to as Sridhar.

As per claims 1,7, Sridhar discloses (a) receiving a message transmission request from a connectionless-oriented user, said request including a message and a destination address of said message (see column 19, lines 14-17, where a request to connect inherently contains a message and a destination address, and connectionless-oriented user is considered user making an HTTP request);

(b) determining whether any one of currently existing sockets, whose file descriptors are stored in a socket management database, is connected to said destination address (see column 19, lines 20-22); and

(c) sending a connection request to a connection manager to be connected to a TCP (transmission control protocol) layer to provide a connection-oriented service to the connectionless-oriented user, if it is determined in the step (b) that none of the existing sockets are connected to said destination address (see column 19, lines 36-56, where connection-oriented service is considered TCP).

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[claim 7] a connection manager creating a new socket connected to said destination address and attempting to connect said module with said TCP layer after receiving said connection request from said module (see column 19, lines 47-56).

As per claims 2,8, Sridhar further discloses sending said message to said TCP layer if it is determined in the step (b) that any one of said existing sockets is connected to said destination address (see column 19, lines 14-20).

As per claims 3,9, Sridhar further discloses creating a new socket connected to said destination address and attempting to be connected to said TCP layer (see column 19, lines 47-56); and

storing a new file descriptor of said new socket in said database if said attempt is succeeded (see column 19, lines 47-51).

As per claims 4,10, Sridhar further discloses newly forming a receiving module for said new socket (see column 19, lines 57-63, where it is implied that any new socket is able to communicate using a receiving module).

As per claim 11, Sridhar further discloses waiting to receive another connection request if said attempt is not succeeded (see column 20, lines 37-41).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sridhar as applied to claim 1 above, and further in view of Vincent et al. (US (US 6,839,732)).

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Although the system disclosed by Sridhar shows substantial features of the claimed invention (discussed above), it fails to disclose informing said user of an incomplete message transmission, if not connected to TCP layer for a given period of time.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Sridhar, as evidenced by Vincent et al.

In an analogous art, Vincent et al. discloses a socket pool for transmitting data, provided that there is an available socket in the pool to use for transmission further disclosing informing a user of an incomplete message if not connected to the TCP layer for a given period of time (see column 7, lines 16-34).

Given the teaching of Vincent et al., a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Sridhar by informing the user of an incomplete transmission, such as disclosed by Vincent et al., in order to give the user a reasonable estimate of the pool size and resources required to process the request.

5. Claims 12 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Sridhar as applied to claim 7 above, and further in view of Internet Protocol Specification.

As per claim 12, although the system disclosed by Sridhar shows substantial features of the claimed invention (discussed above), it fails to disclose a message header including a message header indicator, a message length, a source address, a destination address and a message identifier.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Sridhar, as evidenced by the Internet Protocol Specification.

In an analogous art, the Internet Protocol Specification that is used for transmission of data over an IP network discloses a message header including a header indicator (see page 11, Figure 4. [Version]), a message length (see page 11, Figure 4. [IHL]), a source address (see page 11, Figure 4. [Source Address]), a destination address (see page 11, Figure 4. [Destination Address]), and a message identifier (see page, Figure 4. [Protocol]).

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Given the teaching of the Internet Protocol Specification, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Sridhar by describing the message header that is used in an IP network, such as disclosed by the Internet Protocol Specification, in order to allow efficient transmission of data using IP packets.

As per claim 13, Sridhar in view of the Internet Protocol Specification further disclose sending the message together with a header to TCP layer using a new socket (see Sridhar column 19, lines 47-56).

As per claim 15, Sridhar in view of Internet Protocol Specification disclose receiving a message transmission request from a connectionless-oriented user at a connection-oriented router (see column 19, lines 14-16);

formatting the message into a connection-oriented protocol data unit (PDU) including a source address of the connectionless-oriented user and a destination address (see column 19, lines 47-56, where source address and destination address are implied by using TCP as shown above); and

transmitting the message through an existing connection-oriented socket connected to the destination address if the socket exists (see column 19, lines 17-20).

As per claim 16, Sridhar in view of Internet Protocol Specification further disclose creating a new connection-oriented socket to the destination address if the existing connection-oriented socket does not exist (see Sridhar column 19, lines 47-56); and

transmitting the message to the destination address using the new connection-oriented socket (i.e. new socket is now handling communication).

As per claim 17, Sridhar in view of Internet Protocol Specification further disclose determining if the existing connection-oriented socket connected to the destination address exists by reading a database including all existing sockets (see Sridhar column 19, lines 20-22).

As per claim 18, Sridhar in view of Internet Protocol Specification further disclose that the connection-oriented router comprises a Transmission Control Protocol (TCP) router including a TCP layer (see Sridhar columns 19 and 20, lines 60-67 and 1-2).

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Response to Arguments

6. Applicant's arguments with respect to claims 1-4,6-13,15-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Chea whose telephone number is 571-272-3951. The examiner can normally be reached on M-F 7:00-4:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dung C. Dinh
Primary Examiner

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Philip J Chea
Examiner
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PJC 8/25/05